

## REMARKS

On page 2, in item 2, of the Office Action the Examiners notes the Applicant's failure to comply with the requirements of receiving the benefit of an earlier filing date under 35 U.S.C. 119(e). The Specification has been amended to include an expressed claim of priority under 35 U.S.C 119(e) to the benefit of United States Application No. 60/197,491 filed in the United States Patent and Trademark Office on April 17, 2000.

Also in item 2, the Examiner rejected SEQ ID NO. 4 under the provision of 35 U.S.C 112, first paragraph, because the TRP8 molecule of SEQ ID NO: 4 of the instant application differs at residues 657, 990 and 1150 from Figure 4 of provisional application No. 60/197,491, filed April 17, 2000. As such, priority to the TRP8 molecule of the provisional application is not supported within the provisional application.

In response, Applicant submits that the Sequence Listing of the instant application was transcribed in error at the above-identified residues. Figure 4 of priority application No. 60/197,491 and SEQ ID NO. 4 of the instant application No. 09/834,792 are the same. SEQ ID NO. 4 of the Sequence Listing should recite pro (proline) at residue 657, asp (aspartic acid) at residue 990 and leu (leucine) at residue 1150 as represented in the sequence shown in Figure 4 of the priority application. With this amendment, Applicant submits a corrected Sequence Listing in both paper and computer readable form. The undersigned hereby states that the content of the paper and computer readable copies of the Sequence Listing submitted pursuant to 37 C.F.R. § 1.821(e) are the same and includes no new matter.

Applicant respectfully request that the rejection of SEQ ID NO. 4 under 35 U.S.C. 112, first paragraph, be withdrawn, and for purposes of examination priority to United States Application No. 60/197,491 is granted.

On page 2, in item 3, of the Office Action the Examiner has objected to the drawings. In response, color photos of Figures 9, 12 and 13 will be forwarded to the Examiner for examination purposes only.

Turning to the substantive matters raised, on page 5, in item 8, of the Office Action the Examiner rejected Claim 17 under the provision of 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time of the application was filed, had possession of the claimed invention.

Reconsideration is respectfully requested in view of this amendment.

Claim 17 has been amended and now clearly and distinctly recites a method for identifying a compound that induces or inhibits the perception of a bitter taste by the activation or inhibition of TRP8. The method of Claim 17 comprises the contacting of a cell, expressing **the human TRP8 channel protein** of SEQ ID NO: 4, with a test compound and measuring the level of TRP8 activation and comparing the level of activation to a vehicle control. Claim 17 as presently amended has written descriptive support as described in the Specification, *inter alia*, at page 15, lines 20, to page 17, line 6, and in Example 6.2.5, page 32-33. Specifically, see page 10, lines 22-27, and page 16, lines 28-30.

On page 7, in item 10, of the Office Action the Examiner rejected Claim 17 under the provision of 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

Reconsideration is respectfully requested in view of this amendment.

Presently amended Claim 17 defines the structural limitations of the method for identifying a compound that induces or inhibits the perception of a bitter taste. The method comprises contacting a cell expressing the human TRP8 channel protein of SEQ ID NO: 4, and measuring the activation of TRP8. An increase in the activation of TRP8 results in an influx of  $\text{Ca}^{+2}$  into the taste cell and a corresponding neural stimulation of bitter taste. Alternatively, the ability of a compound to inhibit bitter tastant induced calcium influx results in inhibition of signal transduction mediated by TRP8. See Specification, generally, at 5.5 “Screening Assays for Drugs and Other Chemical Compounds Useful in Regulation of Taste Perception”, pages 15-23.

Further support for the functional limitations of the presently claimed method for activation of TRP8 protein or nucleotide is described in the Specification as “the ability of test molecules to modulate the activity of *TRP8* may be measured using standard biochemical and physiological techniques...,” see Specification at page 17, lines 12-13. Also, the activation of the “cells expressing the TRP8 channel protein are exposed to a test compound or to vehicle controls (e.g. placebos)...the cells can be assayed to measure the expression and/or activity of components of the signal transduction pathway of *TRP8*, or the activity of the signal transduction pathway itself can be assayed”, see Specification at page 17, lines 7-11.

The courts hold that “patents are written by and for skilled artisans”, otherwise it would require every patent document to include a technical treatise for the unskilled reader. This requirement has been long rejected of patent disclosures. See *S3 Inc. v NVIDIA Corp.*, 259 F.3d 1364, 1371 (Fed. Cir. 2001) citing *Atmel Corp. v Information Storage Devices, Inc.*, 198 F.3d 1374 at 1382. The law is clear that patent documents need not include subject matter that is known in the field of the invention and is in the prior art. See *Vivid Technologies, Inc. v American Science and Engineering, Inc.*, 200 F.3d 795, 804 53 USPQ2d 1289, 1295 (Fed. Cir. 1999)

On pages 8-14, of the Office Action, the Examiner rejected Claim 17 under the provision of 35 U.S.C 102(b) as being anticipated by Okada et al., Journal of Biological Chemistry, (1999 Sep 24) 274 (39) 27359-70, and Estacion et al., Biochemical Journal (1999 Jul 1) 341 (pt 1) 41-9, in view of a filing date of April 13, 2001, for the instant application.

Reconsideration is respectfully requested in view of this amendment.

Applicant has presently amended the Specification to comply with the requirements of receiving the benefit of an earlier filing date under 35 U.S.C. 119(e). This Application expressly claims priority under 35 U.S.C 119(e) to United States Application No. 60/197,491 filing date of April 17, 2000. As such, Examiner's rejections under the provision of 35 U.S.C 102(b) as being anticipated by Okada et al., and Estacion et al., are rendered moot.



In view of the foregoing discussion, applicant respectfully submits that the pending claims are allowable over the cited prior art. Allowance of the claims is therefore respectfully solicited.

In view of the foregoing, an early and favorable action is earnestly solicited.

Respectfully submitted,

James V. Costigan  
Registration No. 25,669

MAILING ADDRESS:

Hedman & Costigan, P.C.  
1185 Avenue of the Americas  
New York, NY 10036-2601  
(212) 302-8989

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